MINUTES
LEARNING STRATEGIES & TECHNOLOGY CONFERENCE
Doubletree Hotel, Tysons Corner, VA
12-13 June 2001

Tuesday, 12 June 2001

TIME   **TOPIC**

0700-0800   Registration

0800-0815   Welcome and Introductory Remarks - Saundra Drummer & Phyllis
               Ferguson, CNET ETS

- Ms. Drummer gave the welcome and opening remarks. She stated we were very fortunate to have our Navy training leadership at this conference to fulfill the CNO goal of a "Revolution in Training". Ms. Ferguson provided administrative remarks and discussed the working groups that were planned.

0815-0845   21st Century Training and Education - RADM Brewer, VCNET

- RADM Brewer opened his remarks with the theme "Revolution in Training". He noted it will happen with or without us, and the Navy needs to get on-board. His vision of 2010 is: wireless communication; a more diverse Sailor; network-centric environment; and smaller crews empowered with all type of technology in learning, such as augmented intelligence. RADM Brewer stressed we are dealing with a well-educated, adult learner that has access to information through IT means. Since individuals process information different, we need to develop a strategy for young recruits that identifies their profile for learning that will continue throughout their Naval career. RADM Brewer gave examples of young adults and their learning through animation. His emphasis was, " The Young Shall Lead Us". Finally, RADM Brewer discussed our current technology efforts in simulation and our future efforts in Virtual Reality and Navy E-Learning. However, he emphasized that no machine or technology will ever replace the Navy instructor. Technology is only a tool for the Navy instructor to use.

0845-0915   Revolution in Training: Human Performance Systems - Dr. Allen Zeman CNO
             N79

- Dr. Zeman briefed part of the Executive Review of Navy Training (ERNT)
  findings and recommendations. He acknowledged the ERNT team members
  that were present at the conference. The ERNT charter that CNO developed
  was presented. Dr. Zeman emphatically emphasized the need for "**One** Navy
  E-Learning" site. He stressed the need for every person to be responsible for
  their own development, and the need for commitment from the leaders for
  development of their subordinates. ERNT looked at industry best practices.
  Industry emphasizes attracting and retaining the "best and brightest". Training
  in industry is seen as a way to attract and retain talent and, like the Navy, are
  quickly adopting E-Learning.   Dr Zeman discussed the ERNT
  recommendation to implement the 4-Q model: (1) establish performance
  standards (2) design human performance solution (3) develop, build and
  integrate tools and (4) execute and measure effectiveness. The ERNT
  recommends an enlisted Sailor continuum or life long learning experience
  throughout their career. The conclusion of the brief provided the product of
  the "Revolution in Training" as an alignment of training to Readiness, meeting
  Sailor expectations, a learning system based on improved human performance,
  and improved manning for the Fleet.

0915-0930   **BREAK**

0930-1015   Technology Integration Plan for Naval Aviation -Lari Manning, PMA-205

- Ms. Manning discussed NAVAIR's courseware surveys that shows many
  platforms using CBT, however duplicative efforts in many cases. Surveys
  also showed multiple authoring systems and hardware in use by various
  platforms. To standardize whenever possible and to ensure maximum
  reusability and interoperability, NAVAIR has developed policy that states
  that new requirements will procure web based delivery with an open
  architecture and comply with IT21. Ms. Manning discussed the following
  NAVAIR's on line ADL tools: design/interface guide; content object
  repository; templates for curricula developers; an automated planning and
  tracking tool for program managers; and a tool to identify common
  content.

1015-1045   OPNAV N77 Initiatives - Mr. Larry McGowan, NAVSEA 92L

- Mr. McGowan discussed NAVSEA's submarine training initiatives,
  including the definition of their Navy Integrated Electronic Classroom
  (NIEC), NEIC testing procedures, and NAVSEA approach for managing
  the submarine electronic classroom network. He indicated submarine
  training is changing from classroom to E-Learning, due to dramatic costs
  savings, less Sailor time away from the ship, and the ability for crews to

obtain training by linking to the submarine schoolhouses. Mr. McGowan discussed a technical Data Knowledge Management System (KMS) in an Integrated Data Environment (IDE). He indicated KMS will build, store, and maintain profiles for users, pull necessary data objects from a content management system and assemble data a library according to needs identified by user profile.

1045-1130   Reengineering Assessment & Homeport Training - Mr. Terry Halvorson, CNET TR

- Mr. Terry Halverson provided an assessment of training, focusing on Homeport, Battle Force, and Technical Training Equipment (TTE) simulation.   Slides were presented that showed the projected and actual classroom reengineering manyears reduced. Classroom and Video Teletraining methodology was identified for projecting man-days using actual course data.   During the discussion of Homeport Training, emphasis was placed on leveraging industry, academia, and other sources. Homeport training is placing training is the Fleet Concentration Areas (FCA's) to improved the quality of life for sailors. A number of areas of Advance Training in the FCA's was discussed, including providing information regarding Local Training Authorities (LTA's), Cisco Networking Academy Program (CNAP), Firefighting, and Micro-Simulation.   PC based simulation of TTE was discussed and use of the desktop computer to simulate operational equipment. Benefits of simulation such as funding, manpower, and IA savings were addressed. Finally, a summary was provided of the investment dollars and the total Return on Investment (ROI) to date.

1130-1300   **LUNCH**

1300-1400   Navy E-Learning - Mr. Bill Dyas, CNET ETS2

- Mr. Dyas identified two major missions of distributed learning, Video Teletraining (VTT) and Navy E-Learning. VTT is going from 11 to 26 ships. MOU is being developed with Marines that will result in a Navy/Marine Corps capability.
  Mr. Dyas gave a history of the two-year development of the Navy E-Learning site, indicating the site was officially opened on Jan 2001 this year. The Next Generation Navy E-Learning opened 15 May 2001 as a .COM with Thinq as the ASP.
  Co-lab in Orlando was involved with CNET in the selection of ASP. Used FasTrac government contract as vehicle. There are 25+ other government agencies that we can leverage resources.
  The major elements of Navy E-Learning are comprised of: Navy Education and Training courses, Professional Development, Collaboration, and Precision Skill Tools. Mr. Dyas explained that the

.COM site is for public access and the .MIL site is for use within the Navy workplace environment or military firewalls. Goal is to have a shipboard and SIPRNET prototypes by end of Aug 01. Working with Submarine School, New London to prototype SIPRNET.

Finally, Mr. Dyas identified what CNET has learned in areas of developing & redesign content, IT security, bandwidth, and accessibility. He indicated that a culture shift is essential, public relations a must, and implementation needs champions.

1400-1425   Navy Virtual Library (NVL) Concept - CAPT Grant Ziebell, CNET ETSO

- CAPT Ziebell briefed the concept of a Navy Virtual Library (NVL): A single port of entry that will provide shipboard Sailors with ready access to a wide variety of learning and information anytime, anywhere, to enhance job performance and improve quality of life. Access to information will be through various libraries, including education and training, shipboard technical information, and quality of life. Goal is to leverage current initiatives from CNET, BUMED, BUPERS, NAVSEA, NAVAIR, and SPAWAR. Distance Support will be the single portal access point. Architecture was presented. Challenge is access, therefore wireless laptops or laptops that will be housed in a rack is being considered. Short, near, and long-term strategy was discussed. Short term is a prototype on a single ship, near term a battle group, with the long term every ship in the Navy.

1425-1445   Building a Framework for the Digital Knowledge Environment - Mr. Mike Parmentier, OUSD

- Mr. Parmentier opened his remarks by indicating OSD is very supportive of the Navy E-Learning initiatives and the Navy is a model for others to use for knowledge management. He indicated that Advanced Distributed Learning is an evolution of distance training that emphasizes large scale cooperation in developing and distributing reusable learning content and tools that conform to a common open architecture specification. Mr. Parmentier emphasized common standards and discussed the evolution of the Shareable Content Object Reference Model (SCORM) and how the Plugfests are used to tests various Learning Management Systems (LMS). He also addressed an expansion of the learning technology standards to a worldwide community and his discussion with various countries. The status of SCORM was provided, with SCORM 1.1 being the present version, and the anticipated timelines for versions 1.2, 1.3, and 2.0. Finally, Mr. Parmentier identified the next steps: develop instructional guidelines, common specification for distributed repositories, establish testing and certification process, and update DoD policy for SCORM compliance.

1445-1500   Reserve Requirements for E-Learning, CDR Jim Nugent, CNO N095

- CDR Nugent provided a list of Naval Reserves "don't's": Naval Reserves do not create own training (same training as active duty); do not set standards (customers eg Fleet set standards); do not own ships (owned by fleet); and majority do not report to duty at a Fleet Concentration Area (FCA) (80% geared to middle of country). CDR Nugent identified the DL training projects, including working NR Senior Enlisted Academy and modularizing the EO, CM, BU, and HM "A" schools. In conclusion, he stated the future of NR training is DL focused and NR is working to accelerate conversion and development of quality SCORM compliant course content.

1500-1515   **BREAK**

1515-1700   Group Session Breakouts - 4 Workshop Sessions conducted concurrently

1) **Developing Curricula in Today's Learning Environment**
2) **E-Learning Issues, Challenges, Opportunities**
3) **Mapping Courses for a Career Continuum**
4) **Education Initiatives**

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0715-0730   Introduction of Agenda Topics & Speakers - Ms Phyllis Ferguson, CNET ETSA

0730-0830   ERNT Findings/Recommendations - VADM (R) Gunn

- VADM Gunn briefed on the Executive Review of Navy Training. **He indicated that his brief to CNO will be in July 2001, therefore a decision on his recommendations has not been made.** Charter was provided to the ERNT by CNO.

ERNT recommends development of a continuous life long learning for the sailor. He briefed on the ERNT strategy that was to reform DOD structures, processes, and organizations and focus on outcomes versus activity. Scope of the ERNT included recruit, initial skill and skills progression, professional education, professional development, and tactical programs. Looked at active enlisted and officers. VADM Gunn indicated a need for a Revolution in Training that must have a Sailor Recapitalization. The Navy is platform centric and needs significant change in how the Navy treats people. He indicated we need to change now, since experience is eroding, our mission complexity is growing, and sailors expect to learn and grow in a time where warfighting risks permit change. Discussion on Personnel Quality Readiness indicated a decline in this index since 1999 and is expected to continue to decrease to 2009, affecting our mission readiness.

   VADM Gunn reported the Navy training system is inefficient and provided factors. Unit level training requirements are unexecutable while individual training requirements continue to increase. He showed simulated war games that indicated the first 5 days of the fight are important. Everyone learns during the fight, but the better prepared you are to enter the fight, the more you learn. If you start behind, you stay behind.

    Resources aren't getting any better. No real growth. Student requirements continue to fall short of requirement, 8668 in FY02 and continuing in outyears. First term attrition is about 40%.

     VADM Gunn listed the lessons learned from history. The common theme was Navy training not organized to deliver training effectively and efficiently. No clear lines of responsibility or accountability, and finally training management is fragmented and lacks central control.

   The ERNT team interviewed a number of sailors. Results: Leaders don't provide time to train; training facilities, resources, and equipment are inadequate, and growth and development are not encouraged. Majority of interviewers stressed the importance of education and training.

    VADM Gunn showed the complexity of the flow of training funds through 11 resource sponsors and 12 major claimants.

   He indicated studies show that employer based training is associated with lower turnover, and education programs have a significant effect on company loyalty. ERNT showed that college participants in the Navy have significant higher reenlistment rates. The more credits, the greater the percentage of reenlistment.

   The ERNT recommendations was identified. They are: Implement a Human Performance system (4Q Model), create a Human Performance Systems Center (HPSC); establish an Integrated Training Commander (ITC); establish a single OPNAV code to be the focal point for resources, planning, policy, approve NTSP's; and create a transformation command comprised of RTC and CNRC mission of recruiting, DEP, and boot camp.

  VADM Gunn explained the role of the new players. The CINC's establish the system performance requirements and the human performance is a part of this requirement. The HPSC reviews the system performance requirement and identifies the human performance support piece with the variety of ways of addressing the human performance support requirements. The CINC's review these human performance requirements and chose one or a mix based on affordability, applicability, speed, agility, etc. The HPSC

goes to the market place, in or outside the Navy, and determines who is best for providing the human performance requirement. The ITC applies the solution and measures results. Product provided to CINC's. CINC's evaluate and make changes.

   The ERNT will propose a continuum of life long learning from recruiting, sailorization, apprentice, journeyman, master, to Navy retirement.

   The ERNT's goals are for the Navy to be in the top "100" employers in five years, reduce attrition by 25 % in boot camp, and improve first term reenlistment by 25%.

   VADM Gunn concluded with three possible implement teams with recommended members: Guiding Coalition, Advisory Group, and Transition Team.

0830-0900   CNET Vision for Learning Strategies and Technology - VADM Harms, CNET

- VADM Harms opened by indicating he had spent his entire career as a consumer of training and now he is a provider of training. He addressed the learning environment and the need to leverage and exploit the value of the human being, and have a learning plan for everyone in the Navy. VADM Harms indicated content was ok, but he is concerned about delivery. We need to ensure access is easy. He stressed the need for the Navy to take risks and for the individual not to fear change. "Be a little uncomfortable with your job.   Training needs to be agile and flexible". VADM Harms discussed duplicative solutions and the many legacy systems in the Navy doing the same thing. In conclusion, he again stressed the need to take risks in the electron world for change to effectively happen.

0900-0915   **BREAK**

0915-1015   CNET Schoolhouse Initiatives - Ms Angela Heard, CNET ETS1

- Ms. Angela Heard briefed the Schoolhouse Re-engineering initiatives. She discussed the collaborative efforts between CNET and the schoolhouses and methodology,   ie. conducting curricula analysis, optimizing learning/motivational strategies, and changing the role of the instructor. The technology infusion process was identified and discussed. Ms. Heard identified the technologies that are being implemented: Advanced Electronic Classrooms (AEC); Learning Resource Centers (LRC); Interactive Multi-Sensor Analysis Trainer (IMAT) and Presentation Technology Classrooms (PTC). A status of the completed, on-going and recommended FY02 completed projects was provided. Ms. Heard provide tangible results of efforts with comments from schoolhouses.

1015-1030   AIM/IETM Interfaces - Mr. Ben Aaronson, NAWCTSD

- Mr. Aaronson provided some background for Authoring Instructional Materials (AIM): developed about 8 years ago; government owned software that works with an integrated COTS; developed to add consistency to developing and maintaining curricula; and initiated to be used by the submarine community. He briefed that the purpose of the Interactive Electronic Technical Manual (IETM) interface is to support the electronic classroom, streamline development of instructor and student training materials, reduce time and effort to update training material, and automate the integration of lesson plans and trainee guides. Mr. Aaronson explained the tagging of the IETM material and the overall benefits on the AIM and IETM interface.

1030-1045   Learning Objects Repository - Mr. Scott Dunlap, NAWCTSD

- Mr. Dunlap briefed the Enterprise Learning Asset Management System. First, he identified how we bind our digital library assets today, eg. powerpoint and the current SCORM related efforts characterized by wrapping XML metadata around chunked content (Shareable Content Objects). Further, he noted that SCORM compliant will not guarantee interoperability. Mr. Dunlap identified some of the current Navy initiatives that need a Navy Integrated Learning Asset Reporting System with functions of creating, deployment, management, architecture, and integration. A small working group was recommended to draft meta tagging interim standards with an issue date of 1 Oct 2001.

1045-1130   CNET CIO Electronic Training Jacket Status (ETJ), NTMPS & INTRPD feedback - Ms Martha Maddux, CNET CIO

- In this brief, Ms. Maddux provided an overview of the Integrated Navy Training Requirements and Planning Database (INTRPD) and the relationship of the Navy Training Management Planning System (NTMPS) and the Electronic Training Jacket (ETJ) to INTRPD. INTRPD is actually a strategy that integrates the manpower, personnel, and training information systems for recruiting, training, education, and distributing fleet qualified sailors to the fleet. She discussed the benefits, goals, and relationship between the various data systems that comprise INTRPD eg. NTMPS, NITRAS and STASS. NTMPS data warehouse structure was discussed with the specific functions of NTMPS identified. Ms. Maddux provided details regarding the ETS: accessible 24/7, read only, currently for active duty Navy personnel. She identified elements of the ETJ that are presently in the system (eg. NEC, NOBC, education, training, ASVAB, language skills, etc) and the planned elements (eg. PQS, GMT, billet information, awards, and advancement information).

1130-1300   **LUNCH**

1300-1330   NMCI Issues for Training - Mr. Curt Jones

- Mr. Jones indicated there is a commitment that no harm will be done to present operations, however the Navy/Marine Corps will have issues that we will have to resolved before implementation.   Contract awarded to EDS was 06 Oct 00. Mr. Jones identified network structure and noted that 40% of contract awards will be to small businesses. He indicated the shore IT establishment is NMCI and the Afloat IT establishment is IT21. The goal is to marry both systems. The following NMCI services were identified: desktop support services, network communication, e-mail, telephone operations, VTC, and naval messaging. CNET NMCI will begin in FY02 and complete transition in FY03. Finally, Mr. Jones discussed key NMCI issues and their impact: legacy systems, security issues, remote access, mobile code, training curriculum, and E-Learning.

1330-1350   Anchor Desk - Mr. Bill Taw, NAVSEA

- Mr. Bill Taw briefed NAVSEA's Distance Support (DS) initiative. Distance Support is a program that provides the sailor with a single desktop point of entry to integrated knowledge and information, simplifying access to Naval maintenance, technical, supply, training, administrative, and personnel resources. Mr. Taw explained that access is through a single portal to deliver content, collaborate, and provide customer relations through a 24/7/365 Anchor help desk. Distance Support is fielded on the Lincoln, Constellation, Roosevelt, and Vincent Battle Groups. Mr. Taw elaborated on the benefits of the help desk, indicating response to CASREPS was reduced from 15 days to 9 days on the Lincoln Battle Group. He provided a display of the DS Next Generation with milestones and CNET role in this system on board ships. He explained DS Next Generation will bring content from other portals, eg. the Training portal for shipboard Navy E-Learning.

1350-1430   Future Opportunities for Learning Strategies/Training Technology - Modeling & Simulation - Dr. Jan Cannon-Bowers, NAWCTSD

- Dr. Cannon-Bowers stated the future of Navy Learning Strategies is to transform the Navy into a Learning Organization. She indicated this will require changes in policy, culture, processes, methods, technologies, and tools. The components, benefits, and future vision of each of these changes were discussed. She discussed performance consulting in PROCESSES; knowledge management and mentoring in METHODS; human performance modeling and intelligent tutoring in TECHNOLOGY;

and advanced distance learning, virtual reality, gaming, scenario based training, electronic performance support in TOOLS.

1430-1445 **BREAK**

Group Reports - Group Leads

1445-1500 Developing Curricula in Today's Learning Environment

- The workshop reviewed the Instruction Strawman - goal of which is to provide standardized guidance for events, actions, processes which impact content (i.e., acquisition, design, production, evaluation, maintenance, etc.). Group recommended more in-depth review; post on web for collaborative comments; collaborate with SYSCOMS, Fleet/Non-NAVEDTRA producers; delineate lifecycle upgrades and maintenance; review content, interfaces and infrastructure. Include Best Practices for: object identification -- training/performance requirements based; and content identification -- review existing media, learning strategies, how to learn "what;" clearinghouse for tools, techniques and processes
.

1500-1515 E-Learning Issues, Challenges, Opportunities

- This workshop briefed ASP/LMS capabilities. Content issues addressed identifying additional COTS products in support of Fleet requirements, process to ID those requirements and guidelines for content developers needed. Authoring tools: selection and integration. Incentives to take an online course -- some agencies offer pay incentives, among others. Dissimilar guidelines across Navy for capturing data/metrics; measures of effectiveness (improved performance) - comprehensive process needed; more feedback to Fleet definitely needed. NMCI concerns addressed. Recommendations included defining e-learning education and training requirements/capabilities - what will/will not be allowed; need more multiple authoring tools; engaging learning materials. Working group will continue via threaded discussions/online forum.

1515-1530 Mapping Courses for a Career Continuum

- Workshop looked at current efforts in the Navy to address Knowledge, Skills, Abilities (KSA's) and levels of competency required for specific Navy jobs/ratings. Briefs were presented by both CNA and NETPDTC. THINQ Learning Solutions Inc addressed capabilities of Navy E-learning to map defined occupations/jobs, KSA's and competency requirements to courses or content objects. Workshop participants discussed possible steps Navy E-Learning could take to leverage existing capabilities. This would

enable learners to easily identify courses they might be interested in based on occupation/job or KSA's.

Recommendation was to focus on IT workforce. Leverage work already completed defining KSA's for DoN civilian workforce and efforts of C4I community for IT and related ratings. DoN CIO POC (Mr. Carl Day) and KSA inventory was provided to CNET ETS during the conference. Follow up discussion, planning and implementation timeline will need to be coordinated with THINQ and integrated into overall Navy E-Learning priority list.

1530-1545   Education Initiatives

- Awarding college credit for courses taken on Navy E-Learning and transferability of that credit among Service member Opportunity Colleges-Navy (SOCNAV) has yet to be articulated. While many Navy residential courses are certified by the American Council of Education (ACE) for college credit, and SOCNAV colleges freely accept these courses toward degree completion, the same is not yet true for most courses delivered by e-learning and Navy E-Learning in particular. The Navy is working with SOCNAV colleges and ACE to determine how e-learning courses can be certified for widely transferable college credit. Recommendation is to continue working group momentum.

1545-1600   Wrap-Up - RADM Brewer / Dr. Allen Zeman

- RADM Brewer asked us to visualize asking a Sailor to solve 9 different faults on a single piece of Navy equipment. This is what we will ask our Sailors to do in the future. He emphasized core values as a part of leadership training and the importance of using technology in training. He gave examples of Navy and Army using movie scenario based training to satisfy our objectives. Dr. Allen Zeman stressed the importance of a "single" Navy E-Learning in the Navy. He indicated that everyone in the room is a leader of the revolution in training, not a follower, and all have come to succeed, not to fail.